

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Amendment of Part 90	)	
of the Commission's Rules	)	WP Docket No. 07-100

**COMMENTS OF THE STATE OF CALIFORNIA**

The State of California as represented by its Department of General Services, Telecommunications Division (hereinafter "State") hereby submits these comments in response to the Commission's *Notice of Proposed Rulemaking and Order* in the above-captioned proceeding.

**INTRODUCTION**

The State operates an extensive array of land mobile radio communications systems for use by various California public safety agencies, including the California Highway Patrol, the Department of Forestry and Fire Protection, the Department of Transportation, the Department of Parks

and Recreation, the Department of Fish and Game, the Department of Corrections and Rehabilitation, the Department of Water Resources, the Department of Justice, the Emergency Medical Services Authority, and the Governor's Office of Emergency Services. We routinely assess the functional and operational needs of California's public safety agencies for radio voice and data communications needs.

The State also is an active participant in various committees and work groups discussing the radio voice and data communications needs of tribal, county, and local public safety agencies. As such, the State has developed a balanced perspective on public safety challenges facing California and the nation which it has drawn upon in commenting on the following topics.

#### **PAGING ON PUBLIC SAFETY VHF FREQUENCIES**

The men and women of the California Department of Forestry and Fire Protection (CAL FIRE) are dedicated to the fire protection and stewardship of over 31 million acres of California's privately-owned wild lands. In addition, the Department provides varied emergency services in 36 of the State's 58 counties via contracts with local governments. Cal Fire is contracted to provide emergency communications center services to many of California's local fire agencies. Cal Fire coordinates (dispatches) over 300,000 calls per year (including paging on the subject VHF frequencies). Of these 300,000 calls, the majority of the dispatches are related to traffic accidents, structure fires, and medical aids - and approximately 7,000 to forest fires. Beyond that, the State is anecdotally aware that about 80 percent of the fire departments in California (as well as the nation) are volunteer-based.

1999 PSWN survey findings<sup>1</sup> reveal that 96% of volunteer and combination fire departments employ paging for emergency alerting of personnel (as opposed to 71% of departments that rely exclusively on career personnel). The same report reveals that 91% of EMS providers rely on paging in the emergency alerting of personnel.

Additionally, though the trend may be changing, a large percentage of fire and EMS agency and interagency communications is conducted on high band VHF systems<sup>2</sup>. Paging on these frequencies by fire and EMS services is widespread. For many public safety entities, the “paging signal” is followed by a “voice dispatch” signal that directs responding personnel directly to the scene. Thus, the overall response-time is reduced significantly. Shifting paging to another band would necessitate the engineering, purchasing and implementations of complete new communications systems, including fixed infrastructure and subscriber units. These are costs that small users, particularly the “volunteer” agencies that make up a majority of the users, cannot afford. Conducting paging on a frequency band different from the band carrying voice traffic may also pose operational challenges to the affected fire and EMS agencies.

There are several significant challenges to the FCC’s postulate. First, the use of paging for the emergency alerting of personnel is in widespread use throughout the nation; second, the majority of the entities utilizing emergency alert paging lack the economic wherewithal to convert to an alternative system; and third, some use of

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<sup>1</sup> PSWN Program Analysis of Fire and EMS Communications Interoperability (April 1999), page 21

<sup>2</sup> PSWN Program Analysis of Fire and EMS Communications Interoperability (April 1999), page 45

paging on VHF high band interoperability channels may be sanctioned and at the behest of the region or state in which they are operated<sup>3</sup>.

However, it appears there is cause for concern. That is, as our population grows, the potential for interference with two-way communications will increase accordingly. Perhaps more concerning is the potential for an escalation of uncoordinated paging traffic on interoperable frequencies.

The foregoing reveals that a problem is developing, but that its solution is far from trivial. The State recommends that a more in-depth analysis of “Paging on Public Safety VHF Frequencies” is warranted to quantify and qualify:

- the problem and its rate of development
- current paging for the emergency alerting of personnel practices
- viable alternatives for consideration

The State strongly recommends that whatever action the FCC ultimately decides upon, that its execution take place over a not less than ten year interval (the minimum anticipated life cycle of public safety communications system).

## **CROSS-BANDING**

The State agrees the Commission should modify Section 90.243 to clarify that all public safety licensees may operate cross-band repeaters under the general mobile relay rules.

## **EXPIRED LICENSES**

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<sup>3</sup> Some paging uses of interoperability channels are state-coordinated; for example, Wisconsin’s Mutual Aid Box Alarm System is a statewide fire mutual aid system using an agreed upon fire interoperability channel (154.265 MHz) for paging and voice communications for notification of alarm activation and units due to respond. The MABAS model is reportedly being used by other states to facilitate the sharing of resources for fire and rescue emergencies.

The State supports the fact that all Part 90 frequency coordinators have now agreed not to coordinate frequencies associated with an expired license until the frequency becomes available for reassignment. This maximizes the time available for the former licensee of a lapsed license to react, and minimizes the number of missteps frequency coordinators and the customers they represent experience when in pursuit of a frequency, or frequencies.

## **INDUSTRIAL/BUSINESS POOL ELIGIBILITY**

The State fully supports the NPSTC request that the rule be amended to permit government surveying operations to utilize Industrial/Business Pool itinerant frequencies.

## **4.9 GHz BAND**

M/A-Com's proposal that the Commission amend its Part 90 rules and grant primary allocation status to point-to-point and point-to-multipoint fixed links that are part of a 4.9 GHz public safety network appears congruous with the broadband mobile services and "hot spot" operations the Commission indicated that it would permit to accommodate automatic high speed file transfers from hot spots to mobile units, such as transfers of maps, building layouts, emergency medical service files, and wanted or missing person images. The proposal certainly provides for greater flexibility within the band, and this flexibility would translate into an escalation in 4.9 GHz public safety band deployments. It would allow government agencies to more fully utilize the 4.9 GHz public safety band in deploying localized broadband systems. As the amount of spectrum is limited, adoption of such a proposal should be predicated on establishing adequate spectrum for mission-critical public safety

mobile operations. The State believes the flexibility afforded by the primary allocation status to point-to-point and point-to-multipoint fixed links that are part of a 4.9 GHz public safety network is worth the cost of determining and establishing the necessary set aside or restricted spectrum within the band. It is worth noting at this point that because of the low cost of 4.9 GHz fixed path equipment solutions, point-to-point links (that are not part of a 4.9 GHz network) are currently being deployed despite the secondary status imposed. These paths have the potential of becoming problematic when the need for activating ad hoc mobile networks arises. This constitutes further justification for determining and establishing adequate set aside or restricted spectrum for mission-critical public safety mobile operations within the 4.9 GHz public safety band.

## **CONCLUSION**

The State remains concerned that “paging” on Public Safety VHF channels is critical to the day-to-day operation of many fire and EMS agencies. This section of the Rules should not be changed without careful consideration of the potential impacts to those operations.

Respectfully submitted,

STATE OF CALIFORNIA

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